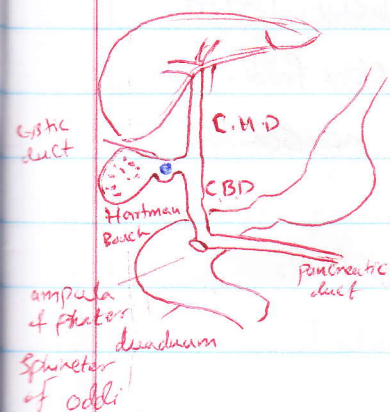


.. زياد

- Small bladder disease.
- acute pancreatitis.
- acute p appendicitis.
- abdominal examination.
- Breast cancer.
- Liver abscess.
- Necrotizing fascitis.
- Madura foot.
- Deep vein thrombosis.
- Diabetic foot.
- cellulitis and erysipellus.
- abdominal hernias.

Gall bladder Stone Cholelithiasis



- The Bile consist of
Cholesterol and bilirubin
- under stimulation of
Cholecystokinin gallbladder
Contract & empty the bile into
the duodenum to digest & degrade
the fatty food.

- Causes :- Stones are of two types :-

yellow-green ① cholesterol stone $\rightarrow$ obesity, fatty food, Diabetes.
Hyperlipidemia, Oral contraceptives, pregnant, crown

Black ② pigment stone "bilirubin" $\rightarrow$ hemolysis ex.:

SCA, thalassemia, Cardiac hemolytic an.

spherocytosis.

- After a fatty meal cholecystokinin stimulate the
gallbladder to contract which make stone to move
& may obstruct the biliary tract anywhere mostly
at the cystic duct which lead to feeling of Pain.

History :-

- * acute Rt upper quadrant pain radiating to the tip of shoulder or subscapular or inter scapular region. "Colicky Pain"
- precipitated by eating fatty food,
"when motion it he get nausea"
- * Nausea, vomiting
- * anoxia ~~toward~~ toward fatty food.
- * Fever.

Examination

* Murphy Sign

feel the fundus of GB during deep
Inspiration. Painful.

at midclavicular line + tip of 9th rib
on costal margin.

* investigation

US , X-ray

* Management:-

- Symptomatic treatment.
- if cholecystitis occur Postpon the surgery to 2-3 months ~~and do~~
- if pericystic abcess developed Dipazertube for 14 days to avoid fistula. then use T-tube.

D.D of Rt upper Quadrant pain:-

- 1) Rt lower lobe pneumonia
- 2) Rt Side H.F . or M.I
- 3) Peptic ulcer.
- 4) Rt Pyelonephritis , ~~not~~ hydronephrosis.
- 5) Pheochromocytoma.
- 6) ~~big~~ Colonic dyspepsia.
- 7) rectus sheath hematoma.

Gall bladder

- Normal it store & concentrate the bile until secretion.
- Secretion is stimulated after fatty meal by cholecystokinin.
- A Reflux from the duodenum into Pylorus may cause alkaline gastritis which cause burning sensation in the stomach which usually occur during fasting.
- gall bile consist of cholesterol and bilirubin.

الأمراض الشائعة

1- Gall bladder stone

2- Cholecystitis

3- Choledocholithiasis

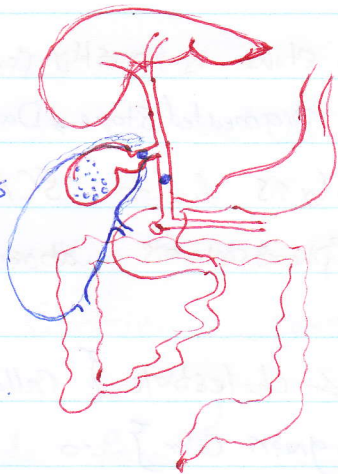
* Complications:

- fistulas

- pyocele, mucocele.

- acute pancreatitis

- Malignancy "cholangio carcinoma"



1 * Cholelithiasis "Gall bladder stone" :-

- History - if a stone is present in the gall bladder it may elicit pain in the Rt upper quadrant Radiating to tip of shoulder subscapular or interscapular area associated or precipitated by eating fatty meal ~~either~~ Colicky in character that comes & goes not continuous this is "Biliary colic"
- associated by Nausea & vomiting.

* Causes :-

- ① if the stone is mostly composed of bilirubin { called pigmented stone → Dark colored } :-
 - hemolysis due to SCA, thalassemia, Spherocytosis, abnormal or mechanical valve.
- ② if it was cholesterol { called cholesterol stone → yellowish-green color } :-
 - hyperlipidemia, Crohn's disease, Diabetic, obesity, use of oral contraceptive pills.

So causes are metabolic, hormonal, ...

* Investigation :-

Ultrasound, x-ray.

* Management :-

Symptomatic + t.

* Now if the stone get stuck in the cystic duct it leads to Acute cholecystitis

2 * Acute cholecystitis :-

History :- Pain is similar but more localized & become duller.

The new thing is that now it is "Continuous" constant.

- Nausea, vomiting anorexia toward fatty meal.
- low grade fever

Examination :-

- Positive Murphy's sign.
- Rigidity & tenderness.

- This develop due to obstruction which causes stasis of bile & inflammation result Mucocoele.

- Investigation:-

- Ultrasound, xray
- CBC WBC ↑

- Management:-

- 1 - Symptomatic treatment.

Morphine, I.V fluid, metronidazole.

- 2 - then a surgery is done after 2-3 months ~~while after doing~~ Laproscopic cholecystectomy.

* if pericystic abscess is developed then a Dipazer tube is introduced followed by T-tube for 14 days then removed. all this done to avoid fistula.

* if pt during this two months still ~~has~~ having multiple attacks an emergency surgery is initiated to avoid fistula or Peritonitis.

Complication:-

Perforation & Fistula formation:-

- 1) if perforated into the colon it will permit stool $\leftarrow$ into the cavity
- 2) if perforated into the duodenum the stone will pass until reach the ileocecal valve & obstruction result called gall stone ileus.

Now if the stone didn't obstruct the cystic duct but obstruct the common bile duct instead leading to cholelithiasis

3* Cholelithiasis "obstructive jaundice" :-

- Pt feel Mild Rt upper quadrant pain has the same radiation but now is associated with epigastric pain.
- Jaundice "sclera ectrus."
- Pruritis "scratch mark in abdomen"
- Nausea, vomiting.

- pale stool, dark urine
- Sweating → B.S under skin
- discomfort & fullness, fatigue.
- anorexia B.S → S.A node

Pt may complain of breathlessness which more a fatigue than dyspnea due to fullness & discomfort caused by hydrohepatitis which push the Diaphragm & stretch gallbladder capsule of the liver.

In obstructive Jaundice there is ↑ conjugated bilirubin

Examination:-

- Murphy sign may be Positive.
- Sclera icterus
- Scratch mark over the abdomen.
- Pt look ill "exhausted face".
- Distension due to aerophagia.

Investigation:-

- CBC WBC ↑
- LFT AST, ALT normal
ALP, GGT ↑
↑ Direct bilirubin.
- Ultrasound
- X-ray

Management:-

- Laproscopic cholecystectomy.
- ERCP "Endoscopic retrograde cholangiography."
for diagnosis & therapy.
By sphincterotomy.

Complications:-

Ascending cholangitis :-

the GI bacteria such as E. coli,

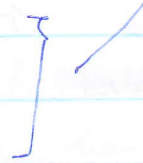
Pseudomonas, enterococci... ascend

ascending C.B.D to the site of
obstruction & colonize there.

this is an emergency as it may
lead to sepsis. septic shock
alter mental status

History - characterized By Charcot's Triads

- fever *
- pain
- Jaundice



- Signs & symptoms of septic shock.
↑ Temperature ↑ PR warm extremities

- investigation:-

- Lft Same
- CBC WBC > 12000 Shift to left
- U/Eraound
- Blood culture & sensitivity

- Management:-

- I.V fluid
- Antibiotics
- ERCP diagnostic & therapeutic.
- T-tube for drainage.

D.D.s. of Rt upper quadrant Pain:-

- 1) Rt lower lobe pneumonia
- 2) Rt side H.F. or M.I
- 3) perforated peptic ulcer.
- 4) Rt Pyelonephritis or hydronephrosis
- 5) Colonic dyspepsia
- 6) pheochromocytoma
- 7) rectus sheath hematoma.

- 5f

- Murphy's sign at midclavicular line + tip of 9th rib.

ob. Jaundice

- Pt should be well prepared for surgery otherwise

Pt may undergo Renal shut down.

- also take the gynae history to Exclude or prove SCA.

Ultrasound, -

- 1) Dilated Radicals "conaticae" → obstruction in biliary tree.
- 2) Stone
- 3) thickness of wall of bile duct.
- 4) Dilated or obstructed cystic duct
- 5) Sclerosis of C. B. D → sign of previous inflammation.

Q, -

PTC

portal H.T

• Drug History

ratio

F ICB

Oshner shirine regimen.

T-tube cholangiography.

Intestinal obstruction

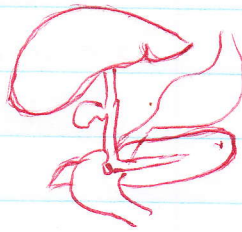
Dynamic & adynamic :-

- obstruction of small intestine.
- Gallstone ileus.
- obstruction of large intestine.
- Volvulus of sigmoid colon or caecum.
- intussusception.
- hernia
- Paralytic ileus.
- Adhesion.

pancreatitis

acute pancreatitis causes :-

- Alcohol
- Trauma
- autoimmune
- Gallstone
- Drugs :- mitomycin, fentanyl, thiazide
- hypertriglyceridemia.



History :-

- epigastric pain radiating to the back & left loin.

Pain aggravated by movement

relieved by sitting up, leaning forward
lying on the side with chest knee position.

- area of maximum pain & tenderness is in the center of abdomen.
- Nausea, vomiting
- weakness
- fever
- hiccups

Signs: - Cullen sign $\rightarrow$ Ecchymosis in
around the umbilicus.

- Gray turner sign $\rightarrow$ Ecchymosis
on the flank.

- tenderness, Rebound tenderness

- guarding, abdominal distention.

Investigation: -

- Amylase / Lipase
more specific.

- hypocalcaemia

- Ultrasound

- CT scan.

- abdominal X-ray $\rightarrow$ Sentinel sign
 $\checkmark$ colon cut off.

management:

- I.V Fluid

- analgesic avoid acetylcholine.
spasm of oddi's sphincter

- Bowel rest

- Nasogastric tube suction

- electrolyte $\rightarrow$ Ca, K

- Nutrition

- Antibiotics

Complications $\Rightarrow$ 1) pancreas pseudocyst - 3) sepsis
2) peritonitis

- * Pancreas product is felt as mass in the epigastrium pain tender & tympany on Percussion "Gastric gas"
- * appears on 7th day & need drainage or medical therapy.

- Acute pancreatitis is reversible ~~and~~ while chronic is irreversible.

- ~~Acute has no jaundice while chronic may have.~~

- chronic has loss of appetite & loss of weight as well.

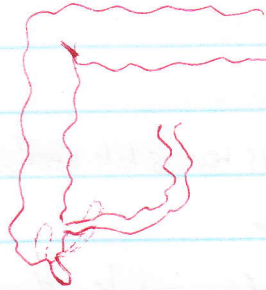
- Jaundice in acute is not uncommon.

because gallstone is one of the most common causes of acute pancreatitis

- Pt look well if acute as it is sudden but look very ill if it was severe

Appendicitis :-

- it is inflammation of the appendix.
- appendix → has origin → Post-medial surface cecum
tip → Free → retrocecal



- retro iliac
- retro pelvic
- per iliac.

Causes :-

- fecalith
 - toomer
 - foreign body
 - lymphoid follicles.
- any age but more common in the young.

History :-

- Pain :-

- Periumbilical $\xrightarrow{4-6\text{hrs}}$ Rt iliac fossa
relieved by drawing legs up. thigh
- Nausea & vomiting
- anoxia
- Constipation & Rarely diarrhoea

Examination:-

- Tenderness Maximum at Macburny Point
- Rebound tenderness
- pain increase by movement even shaking the bed.
- Pt looks ill & lies still.
- Pain ↑ by coughing "Dunphy's sign"
- Rousign's sign
- obturator sign
- iliopsoas sign
- Guarding

Investigation :- only if there is doubt.

- U/S - WBC count - CT scan

Complication

- gangrenous WBC $\uparrow\uparrow > 18,000$
- Perforation $\rightarrow$ Peritonitis $\rightarrow$ rigidity + diffuse tenderness
mass "walled by omentum"
- fistula. neointestine
fistula
abscess

* D.D :-

- Ectopic pregnancy
- Ovarian mass
- Obstruction "intussusception"
- Gastroenteritis
- tonsillitis
- Meckle diverticulitis
- Cecal Ca.
- Crohn's disease.

Management :-

emergent appendectomy.

Abdominal examination

- Inspection -

- 1- Contour "Shape" : flat , extended , scaphoid.
- 2- movement :
 - pulsation
 - valvulus.
 - peristalsis
 - type of breathing.
- 3- Marks :
 - Scar
 - scratch
 - cicatrix
- 4- mass.
- 5- Costal margin :- normal , sharp , obtuse.
- 6- hernial orifice : epigastric , umbilical , Para umbilical
inguinal , femoral.
- 7- hair distribution :-
 - masculin
 - feminin
 - Nor
 - mal.
- 8- Genitalia :-
- 9- Lumber area
- 10- umbilical area :-
 - Site : central
 - Shape : everted inverted
 - Deviation : upward / down / lateral.
 - Color
 - hernia
 - Discharge

11- Up raising test:-

to determine whether the mass is superficial or Intra-abdominal.

By up raising test → mass → visible → Superficial
↓
disappears → Intra-abdominal

Palpation:-

- Superficial:-

look for:- mass

- muscle : Relax, guarding, tense.

- Temperature

- Tenderness

- Deep:-

look for:- mass

muscle

temperature

tenderness

for the mass determine:-

- Site

- Surface

- Size

- Fix - Free mobile

- Shape

- Compress

- palpable / transmitted.
- cross midline borders.

3) Spleen and Liver, kidney.

- Percussion Thrill
- Auscultation ~~thrust~~ for? -
Bruit, Bowel Sounds, venous hum.

Breast Cancer:-

- more common in females.

- more aggressive in male.

* Risk factors :-

- Sex female

- hormonal factors

- genetic factors

- early menarche

- late menopause

- late Delay of 1st pregnancy.

- Smoking

- obesity

- high class individuals.

* Features of ca:-

- Discharge from nipple "serous or serosanguinous."

- Lump or enlarge breast

- change in the color

- ulcerations.

- Lymph node involvement

- Invasion the chest wall or skin.

- feel Pain $\rightarrow$ Deep and constant.
- Eczema or Paget's disease of the nipple.

* Sarcoma:-

fibrosarcoma, cystosarcoma, Liomyosarcoma, Rhabdomyosarcoma.

Fibrom

cystosarcoma "Brodie's disease" :-

- cystic degeneration of fibroadenoma
- Skin over the tumor $\rightarrow$ ulceration

ulcer "healing edge, pulling out, base is the tumor"

- fungated tumor.

breast is firm, enlarged veins, thin skin.



Liver abscess

* D.I.D.:-

Subphrenic abscess.

* Causes :-

- amebic abscess
- From Gut " typhoid, T.B, actinomycosis, hydatid, colon disease, O.C, colonic ca. "
- From biliary obstruction infection.
- Septicaemia
- Penetrating injury

* Complications :-

- Perforation → Peritonitis
- Pleural infection effusion
- changes in Lung, Pleura, intestine, Peritoneum.

* History :-

Fever, rigor, pain in Rt upper quadrant
tenderness, Fullness.

Examination :-

- enlarged Liver.
- tenderness

Example, -

Amoebic Liver abscess :-

- due to Amoebic dysentery.
- fever rigor pain & fullness
- tender enlarged liver.
- may irritate the lower lobe of lung or Pleura leading to :-
 - pleural effusion.
 - coughing of chocolate colored sputum.
- may rupture & lead to acute peritonitis.
- may form amoeboma in the caecum or rectum.
- Treatment, - Antibiotics.

Necrotizing fasciitis

- infection of the fascia & subcutaneous tissue.
- Etiology:
 - I.M or I.V injections
 - Surgical Procedures
 - Insect Bite
 - Interventional procedure Ca. catheterization ,
Laprosopy
 - abrasions

Risk factors.

- HIV
- D.M
- alcoholism
- Leukemia , Lymphoma

Organisms.

- most common $\Rightarrow$ group A streptococci or Staph. aureus.
- Clostridium perfringens.

aerobes or anaerobes.

History:-

- Severe Pain & tenderness
- malaise, malaise
- Fever

Examination:-

- erythema
- Neutrosis, gangrenous
- bullae

Complications:-

- septic shock
- limb loss

Madura foot

- an infection of the foot, a granulomatous infection, chronic.

- Etiology:-

1) Pt walking barefoot with minor abrasion on a dust.

2) agriculturists on time shoulders, hand/bark by contact with uncleaned dirty vegetables.

- organism:-

Fungi → actinomycetoma
eumycetoma

- History:-

- a painless firm nodule appears in the sole & enlarge with time while others appear.

- a vesicle develop on the nodule & rupture ^{forming} → Discharge of "Purulent, mucoid" _{sinus} has granules

- Seemingly bacterial infection causes enlargement of the foot.

- the granules are red, yellow or black
black $\rightarrow$ spread to subcutaneous
yellow, red $\rightarrow$ " " bones, muscles

- Not associated with lymphadenitis or
blood born - spread

- Nerving & tendons are not
involved.

D.D:-

- T.B

- syphilis

- Kaposi's sarcoma

Deep vein thrombosis

- Venous system :-

Superficial :-

Long saphenous

Short :-

Deep :-

Popliteal

superficial + Deep femoral

connected by perforating veins

- the vein has valves + muscle contraction that prevents back flow of blood by the effect of gravity.

DVT :-

* risk factors :-

- Female
- pregnancy
- recent surgery
- obese
- > 40 years
- immobility
- Coagulation disorders
- Drug abuse
- varicose vein
- History of DVT or Pul. embolism.

* Pathophysiology -

2 or more of the Virchow triad.

1) Endothelial injury

2) Coagulable state

3) Venous stasis.

etiology -

- Drug abuse.

- Pelvic fracture.

- Surgery.

- hip replacement.

* History -

Swelling

tenderness

pain

mild fever

erythema

ulceration, varicose vein later.

* Examination

- Do the usual examination

- Swelling

- prominence of vein on Dorsum of feet

- purpale color on skin.

- Ankle edema or whole leg.

Popliteal ←

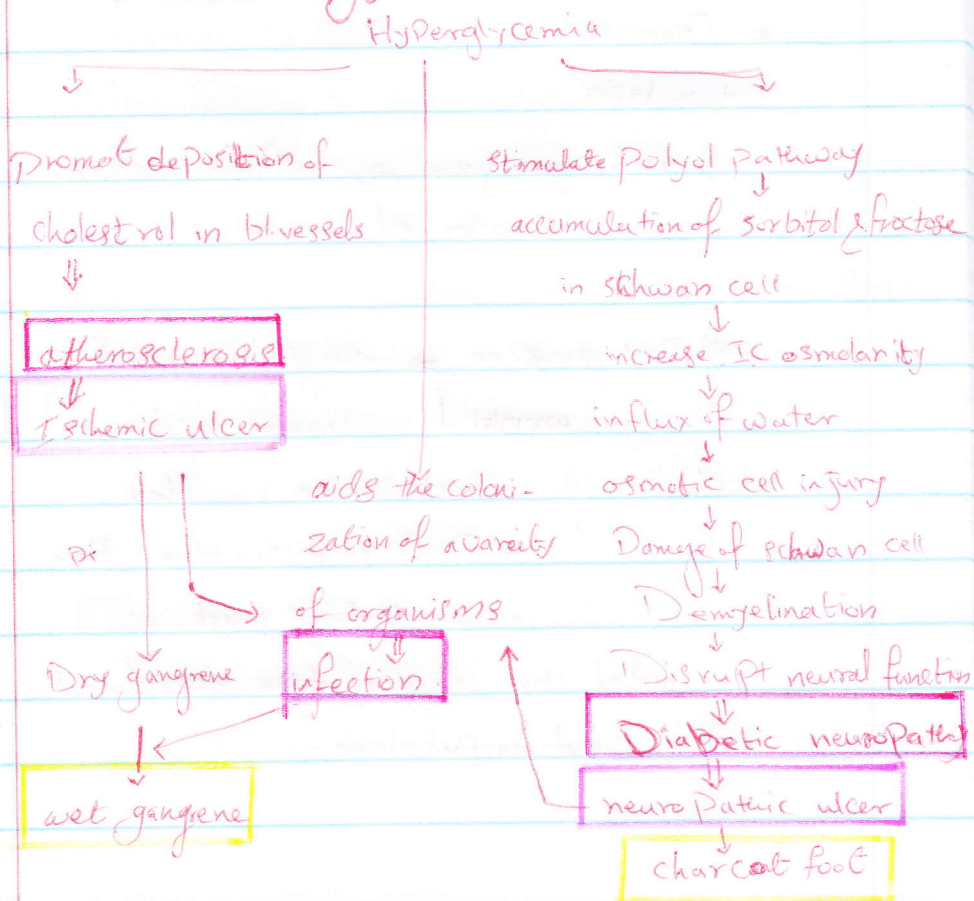
↑ femoral.

Diabetic foot

Clinical presentation are :-

- ulcer $\rightarrow$ Ischemic and/or neuropathic
- Charcot's Joint
- Gangrene

Pathophysiology :-



* Charcot's joint,

Acute → swelling, erythema, raised skin temperature, joint effusion, bone resorption.

Characterize by :-

Pathological Fracture, Joint dislocation and Fragmentation of articular cartilage.

* Gangrene :-

two types :-

1) wet gangrene → offensive odor, swollen, red, warm.

2) Dry gangrene → aching pain, cold, dry, wrinkled, changes in color :-

- Dark brown then
- Dark purplish-blue then
- completely black

Treated by surgical debridement and amputation.

* Ulcers :-

Q: How to examine ulcers?

Answer:-

- Site
- Shape
- Base
- edge
- Discharge
- examine the local lymph node.
- see relation to surrounding tissue.
- General examination.
- Size: width / length
- margin
- Borders
- floor
- color

Note: the only one done by palpation is the Base
to determine 1) tenderness 2) consistency
3) induration 4) Discharge.
Others are determined by inspection.

Examination of a diabetic foot :-

1 Recommend OSCE videos.

* Investigation:-

- Blood sugar
- Lipid profile
- Renal function
- HBA1c
- Dopler, Doplex US
- Simple x-ray

Cellulitis and Erysipellus

Cellulitis

- Head, extremities, neck
- warm erythematous
- ill defined plaques
- vesicles, bullus, pustule, necrosis
- oedematous, tender
- fever, chills, nausea, vomiting, malaise
- lymphangitis, lymphadenopathy
- Post inflammatory pigmentation

Erysipellus

- face, extremities
- Hot erythematous
- well defined
- indurated, tender
- preceded by trauma, abrasion, T. pedis
- Port of entry of bacteria *S. pyogenes*.
- S. aureus*, *S. pyogenes*, ...

- Treatment :-

- elevation
- anticoagulant
- analgesic, antipyretic
- Antibiotic. → Crystalline penicillin
- Daphnone

Hernias

- is a protrusion of a viscus through a normal or an abnormal - congenital or acquired - defect in the wall that contains it.

- there may be a history of straining or heavy lifting and obesity.

- Types:-

Inguinal	} most common.	- epigastric
femoral		- incisional
umbilical		- obturator
paraumbilical		- lumbar
		- spigelian

- Clinical presentation:-

- lump local discomfort.

- complicated $\Rightarrow$ obstructed, strangulated

* obstructed hernia $\Rightarrow$ irreducible, may be due to adhesions of the gut or omentum in a long standing sac.

- leading to the onset of ~~colic~~ colicky abdominal pain, constipation, vomiting and distension.

* strangulated hernia → the b. supply of to the sac is impaired. After which the gut become atonic and perforate. occasionally the content may become infected.

3 important physical signs:-

- 1) reducible.
- 2) visible and pt. palpable on cough impulse.
- 3) " " " on ap-raising test.

Notes-

it could be classified into :-

- Direct → starting in the weaker medial post. wall

- Indirect →

Starting at the deep inguinal ring of the inguinal canal medial to the inferior epigastric artery passing through the canal to the scrotum. through Hasselbach's triangle.

Q - How to examine a hernia?

- inspection:-

Position

color

Temp. Size

Shape

Cough impulse.

- Palpation:-

Temperature

Tenderness

Composition

Reducibility

- percussion:-

tympanic $\rightarrow$ gas

dull $\rightarrow$ Ascitic fluid

- Auscultation:-

bowel sounds $\rightarrow$ gut

absent $\rightarrow$ omentocoele, strangulated.

- regional lymph node.

- relation to surrounding tissue

- general and abdominal examination.

if patient describe hernia But yet no lump is found $\rightarrow$ - re-examine at standing after they've walked or go up stairs.

- re-examine after a month if still not detected.

- re-examine less frequently until an abnormality is found or symptoms disappear.

D.D of inguinal hernia -

- Femoral hernia
- hydrocele.
- Undescended testis
- Lipoma of the cord.

Notes: hernia is visible on standing, straining and cough.
reducible by laying or by hand press.

Diabetic foot examination.

- Introduce your name.
- Ask for consent.
- warm your hands.

Inspection →

- Inspect & compare limb color: Pallor / erythema.
- hair loss
- skin changes: Dry, shiny, hemosiderin staining.
- ulcers
- Deformities, joint dislocation, Charcot's foot
- look b/t the toes for ulcers or T. pedis.
- check the bottom of feet.
- look for callus on feet: gait abnormality / poorly fitting footwear.
- Inspect the heels.

Palpation :-

- Assess and compare temperature.

Predsol-Predsol Forte
Prednisolone

Probric Solution
Bambuterol

- check capillary refill
- Assess pulses. Posterior tibial, dorsal pedis.
- popliteal pulse.
- Test sensation :-
 - 1) Soft touch. by cotton.
 - 2) Discriminate sharp, dull touch
 - 3) vibration: in bony prominents.
 - 4) using monofilaments.
 - 5) position. proprioceptive
 - 6) Reflexes

Gait

- Look at patient shoes.
- Thank the patient.
- wash your hands.